

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants:	Matthias Schulist, <i>et al.</i>	§	Group Art Unit:	2618
		§		
Application No	10/526,520	§	Examiner:	Nguyen, Hai V
		§		
Filed:	03/03/2005	§	Confirmation No:	8324
		§		
Attorney Docket No: P16105-US1				
Customer No.: 27045				

For: Requesting and Controlling Access in a Wireless Communications Network

**Via EFS-Web**

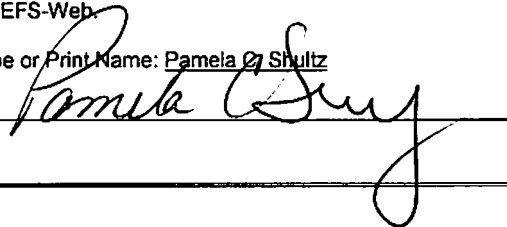
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**APPEAL UNDER 35 U.S.C. §134**

This Brief is submitted to appeal the decision of the Primary Examiner set forth in the Final Official Action dated January 16, 2009, and the Advisory Action dated April 8, 2009, finally rejecting claims 17-30, which are all of the pending claims in this application.

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §41.20(b)(2) that may be required by this paper, and to credit any overpayment, to Deposit Account No. 50-1379.

**Real Party in Interest**

The real party in interest, by assignment, is: Telefonaktiebolaget LM Ericsson (publ)  
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### **Related Appeals and Interferences**

None.

### **Status of Claims**

Claims 1-16 were previously cancelled and are not appealed. Claims 17-30 remain pending, each of which are finally rejected. Claims 17-30 stand rejected, under 35 U.S.C. §103(a) as being unpatentable over Li, *et al.* (US 2003/0026324) in view of Lim, *et al.* (US 7324465). Claims 17-30, including all amendments to the claims, are attached in the Claims Appendix. The rejection of claims 17-30 is appealed.

### **Status of Amendments**

The claims set out in the Claims Appendix include all entered amendments. No amendment has been filed subsequent to the final rejection.

### **Summary of Claimed Subject Matter**

<b>Claim Element</b>	<b>Specification Reference</b>
17. A method of requesting access to a node of a wireless communications network, the method, comprising the steps of:	
a) determining information about a transmission path within the network;	Page 14, line 12, <i>et seq.</i>
b) determining an identification code to differentially identify a requesting network component from other network components based on the determined transmission path information, wherein previously an association between identification codes and transmission path information has been established; and	Page 14, line 21, <i>et seq.</i>
c) modulating, by the requesting network component, the determined identification code onto a signal to generate an access request signal from which transmission path information may be derived.	Page 15, lines 1-21

<b>Claim Element</b>	<b>Specification Reference</b>
22. A method of controlling access to	Page 16, line 22 – page 17, line 12

a node (BS) of a wireless communications network, the method comprising the steps of:	
a) receiving an access request signal onto which an identification code has been modulated by a requesting network component, the identification codes differentially identifying the requesting network component from other network components;	Page 16, line 26, <i>et seq.</i>
b) analyzing the identification code to derive a transmit power level therefrom, wherein previously an association between identification codes and transmit power levels has been established;	Page 16, line 26, <i>et seq.</i>
c) transmitting an access control signal including access control information at the transmit power level derived in step b).	Page 16, line 34 – page 17, line 12

Claim Element	Specification Reference
27. A network component configured to request access to a node of a wireless communications network, said network component comprising:	
a first determination unit for determining information about a transmission path within the network;	Page 15, line 16, <i>et seq.</i>
a database including data associating identification codes and transmission path information, wherein said identification codes differentially identify a requesting network component from other network components; and	Page 16, line 7, <i>et seq.</i>
a second determination unit for determining, in dependence on the determined transmission path information, an identification code to be included in an access request signal sent from the requesting network component from which transmission path information may be derived.	Page 16, lines 2-20

Claim Element	Specification Reference
29. A network component configured to control access to a node of a wireless	

communications system, the network component comprising:	
a database including data associating identification codes from which transmit power information may be derived, wherein said identification codes differentially identify a requesting network component from other network components;	Page 16, line 26, <i>et seq.</i>
an analyzer for analyzing the identification code included within a received access request signal sent from the requesting network component, with respect to the transmit power information associated with the identification code; and,	Page 16, line 26, <i>et seq.</i>
a derivation unit for deriving from the transmit power information obtained by the analyzer a transmit power level for an access control signal.	Page 16, line 30, <i>et seq.</i>

The specification references listed above are provided solely to comply with the USPTO's current regulations regarding appeal briefs. The use of such references should not be interpreted to limit the scope of the claims to such references, nor to limit the scope of the claimed invention in any manner.

### **Grounds of Rejection to be Reviewed on Appeal**

Whether claims 17-30 are patentable over Li, *et al.* (US 2003/0026324) in view of Lim, *et al.* (US 7324465).

### **Argument**

As a preliminary matter, the Applicants wish to apprise the Board of the partial history of prosecution. In an Office Action dated June 4, 2008, the Examiner rejected claims 17-30 as being ***anticipated*** by Li, *et al.* (U.S. Patent Publication No. 2003/0026324). In response, the Applicants made a minor amendment to claims 17, 22, 27 and 29 to make explicit that the step or function of "modulating [a] determined identification code onto a signal *to generate an access request signal* from which transmission path information may be derived" (emphasis added) *is performed by a*

"requesting network component," and submitted arguments pointing out that Li failed to teach the claim limitations of "b) determining an identification code to differentially identify a requesting network component from other network components based on the determined transmission path information, wherein previously an association between identification codes and transmission path information has been established; and c) modulating, by the requesting network component, the determined identification code onto a signal to generate an access request signal from which transmission path information may be derived."

In the Final Office Action, dated January 16, 2009, the Examiner rejected Applicants' arguments as moot in view of a "new ground(s) of rejection . . . necessitated by Applicant's substantial amendments to the claims 17, 22, 27, 29 which significantly affected the scope of claims thereof." The new grounds of rejection are based on the additional reference Lim, *et al.* (US 7324465).

The Examiner's position is untenable. First, the amendments made to claims 17, 22, 27 and 29 merely made explicit what was already implicit in the claim limitations, particularly when read in light of the specification; *i.e.*, that the "access request signal" is generated by a "requesting network component." Furthermore, the Examiner's claim rejection was based on the assertion that Li taught all of the claim limitations, yet in the Final Office Action the Examiner acknowledged that Li fails to do so, even with respect to claim limitations that the Applicants did not amend. In other words, the Examiner's prior basis of rejection (that all claims were anticipated by Li) was deficient, and it was improper for the Examiner to issue the Final Office Action based on the addition of an additional prior art reference to cure the acknowledged deficiencies of Li.

Turning now to the present substantive basis of rejection, the Examiner has rejected claims 17-30 as being unpatentable over Li, *et al.* (US 2003/0026324) in view of Lim, *et al.* (US 7324465). The Applicants traverse the rejections.

As noted *supra*, the Examiner acknowledged that "Lin [*sic*; should be Li] does not explicitly disclose [*sic*] b) determining an identification code to differentially identify a requesting network component from other network components based on the determined transmission path information, wherein previously an association between identification codes and transmission path information has been established; and c)

*modulating the determined identification code onto a signal to generate an access request signal **from which transmission path information may be derived.***" (Final Office Action, page 3, line emphasis added) To overcome the acknowledged deficiencies of Li, the Examiner looks to the teachings of Lim. Even if it were accepted as true what the Examiner states is taught by Lim, which the Applicant does not affirm, the Examiner fails to point to any teaching in Lim directed to "modulating [a] determined identification code onto a signal to generate an access request signal **from which transmission path information may be derived.**" The Applicants specification describes at page 14, line 21, to page 15, line 21, an exemplary mechanism for modulating a determined identification code onto a signal to generate an access request signal from which transmission path information may be derived. The Examiner, however, has not pointed to any similar teaching by Lim.

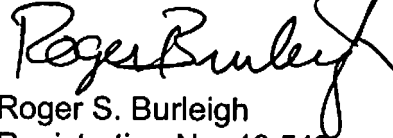
Moreover, the Examiner asserts that it would have been obvious to incorporate Lim's teachings, with the teachings of Li, of the "association between the preamble codes and spreading codes as identification codes." That, however, is not what Applicants have claimed. The Applicants' claims are based on "an association between identification codes and **transmission path information.**" (emphasis added) Again, the Examiner does not point to any teaching in Lim relating to transmission path information, much less the "[modulation of a] determined identification code onto a signal to generate an access request signal **from which transmission path information may be derived.**" Accordingly, Lim fails to overcome the deficiencies in the teachings of Li and, therefore, claim 17 is not obvious in view of those references.

Whereas independent claims 22, 27 and 29 recite analogous limitations, those claims are also not obvious in view Li and Lim. Furthermore, whereas claims 18-21, 23-26, 28 and 30 are dependent from claims 17, 22, 27 and 29, respectively, and include the subject matter thereof, they are also not obvious in view of those references.

## CONCLUSION

The claims currently pending in the application are patentable over Li in view of Lim, and the Applicants request that the Examiner's claim rejections be reversed and the application be remanded for further prosecution.

Respectfully submitted,



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Date: July 14, 2009

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## **CLAIMS APPENDIX**

1-16. (Cancelled)

17. (Previously Presented) A method of requesting access to a node of a wireless communications network, the method, comprising the steps of:

- a) determining information about a transmission path within the network;
- b) determining an identification code to differentially identify a requesting network component from other network components based on the determined transmission path information, wherein previously an association between identification codes and transmission path information has been established; and
- c) modulating, by the requesting network component, the determined identification code onto a signal to generate an access request signal from which transmission path information may be derived.

18. (Previously Presented) The method of claim 17, further comprising:

- d) analyzing an access control signal that is received in response to the access request signal and that includes access control information.

19. (Previously Presented) The method of claim 18, wherein the access control signal simultaneously includes access control information for a plurality of network components and wherein the access control information for each network component is associated in the access control signal with an individual identification code.

20. (Previously Presented) The method of claim 19, wherein the access control signal is subjected to an interference canceling step which includes subtracting from the access control signal a compensation signal relating to access control information that is not associated with the identification code determined in step b).



21. (Previously Presented) The method of claim 17, wherein the access request signal including the identification code determined in step b) is transmitted repeatedly using transmit power ramping.
22. (Previously Presented) A method of controlling access to a node (BS) of a wireless communications network, the method comprising the steps of:
- a) receiving an access request signal onto which an identification code has been modulated by a requesting network component, the identification codes differentially identifying the requesting network component from other network components;
  - b) analyzing the identification code to derive a transmit power level therefrom, wherein previously an association between identification codes and transmit power levels has been established;
  - c) transmitting an access control signal including access control information at the transmit power level derived in step b).
23. (Previously Presented) The method of claim 22, wherein step b) comprises analyzing the identification code with respect to transmission path information associated therewith, wherein the identification codes are associated via transmission path information with transmit power levels and wherein the transmit power level corresponding to a specific identification code is derived from the transmission path information corresponding to the specific identification code.
24. (Previously Presented) The method of claim 22, wherein the access control signal includes the identification code analyzed in step b).
25. (Previously Presented) The method of claim 22, wherein the access control signal simultaneously includes access control information for a plurality of network components which are requesting access to the node and wherein the transmit power level for the access control signal is derived and adjusted individually for each network component which requests access.

26. (Previously Presented) The method of claim 17, wherein the identification code is selected out of a predefined set or range of identification codes.

27. (Previously Presented) A network component configured to request access to a node of a wireless communications network, said network component comprising:

- a first determination unit for determining information about a transmission path within the network;

- a database including data associating identification codes and transmission path information, wherein said identification codes differentially identify a requesting network component from other network components; and

- a second determination unit for determining, in dependence on the determined transmission path information, an identification code to be included in an access request signal sent from the requesting network component from which transmission path information may be derived.

28. (Previously Presented) The network component of claim 27, further comprising:

- a modulator for modulating the selected identification code onto a signal to generate the access request signal; and,

- a transmitter for transmitting the access request signal.

29. (Previously Presented) A network component configured to control access to a node of a wireless communications system, the network component comprising:

- a database including data associating identification codes from which transmit power information may be derived, wherein said identification codes differentially identify a requesting network component from other network components;

- an analyzer for analyzing the identification code included within a received access request signal sent from the requesting network component, with respect to the transmit power information associated with the identification code; and,

a derivation unit for deriving from the transmit power information obtained by the analyzer a transmit power level for an access control signal.

30. (Previously Presented) The network component of claim 29, further comprising:

a receiver for receiving the access request signal onto which the identification code has been modulated; and,

a transmitter for transmitting the access control signal at the transmit power level derived by the derivation unit, wherein the access control signal includes access control information and, preferably, the identification code which has been modulated onto the received access request signal.

\* \* \*

## **EVIDENCE APPENDIX**

None.

**RELATED PROCEEDINGS APPENDIX**

None.